United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry

"VETERANS IN PIPING" Wisconsin

Accelerated Welding Program

Program Description for Candidates & Case Managers

Version 2: January 2012

Section I Background Information

The United Association (UA) VIP Welder Training Program is a voluntary training program. Trainees that apply for the program will be interviewed for selection. The training program is approximately 20 weeks in duration, consisting of 40-hour weeks and 8+ hour days. Classes are administered by UA Instructors and are held daily Monday thru Friday at a designated UA Training Facility. The training in Wisconsin is currently conducted at Ft. McCoy for the first two weeks and Volk Field/Camp Williams for the remaining 18 weeks.

The UA VIP welder training program is competency based; students may progress at their own rate of speed, in accordance with UA standards. If, for any reason an applicant believes they may not be able to complete the training course, admission into the program may be denied. The United Association or the UA Training Instructor may rescind any student's invitation to participate in the training program at any time, without advance notice. A student will be dismissed upon his or her third absence or third tardy.

Student applicants to the training program must be 18 years old or older, with a high school diploma or a General Education Development (GED) certificate and must hold a current drivers license. Students must have good eyesight, using corrective lenses if necessary. Student must provide a copy of a recent eye exam (within the last six-months) showing acceptable near distance vision. Student applicants must pass a urinalysis drug test to be accepted into the welder training program.

VIP trainees are required to obtain a Transportation Worker Identification Credential (TWIC). The TWIC is a vital security measure that will ensure individuals who pose a threat do not gain unescorted access to secure areas of the nation's maritime transportation system. The TWIC is an identification credential to maritime workers requiring unescorted access to secure areas of port facilities. The fee for TWIC is $132.50 and is valid for five years.

To obtain a TWIC, an individual must provide biographic and biometric information such as fingerprints, sit for a digital photograph and successfully pass a security threat assessment conducted by TSA. Once selected for a VIP class, trainees are encouraged to apply immediately for the TWIC card. For more information:
http://www.tsa.gov/what_we_do/layers/twic/program_info.shtm

VIP trainees are required to take the Accuplacer aptitude test either before or during the training. Information about the Accuplacer, to include practice questions, are available at:
www.accuplacer.org

Training will be provided to the trainee at no cost to the individual participant. However, trainees are not paid during the 20 week VIP training program. At this time, the Department of Veterans Administration has not approved the VIP program for veteran's education benefits. Upon completion of the VIP training and placed into an apprenticeship position, veterans are eligible to claim veteran's education benefits. Disabled veterans may be eligible VA Vocational Rehabilitation program. Trainees that are eligible for UI benefits in Wisconsin are able to continue to receive UI benefits while participating in VIP. Veterans can apply to their local Workforce Development Agency to determine possible eligibility for training support funding.

Each student must provide their own personal protective clothing; steel toed work boots and those with prescription glasses must have ANSI certified safety eyewear. The UA Welder

Training Program will provide students with a welding hood, safety glasses, face shield, ear plugs, and other necessary tools and welding equipment.

In addition to the subjects covered in different sections of this program document, the students should receive instruction in basic math skills, such as fractions, decimals, angles, tolerances; and piping and equipment terminology used on the job.

Prior to the completion of the training program students must attend and satisfactorily complete an OSHA 30 course, the Accuplacer aptitude test, a Heritage class and a class on the UA Standard for Excellence.

More details concerning VIP candidate prerequisites are included in the VIP Application.

Section II Veterans in Piping (VIP) Training Program Description

The Department of Workforce Development in partnership with the Wisconsin Department of Military Affairs and the United Association of Plumbers and Pipefitters coordinates the Veterans in Piping (VIP) Program. The VIP program is designed for Veterans, to include currently serving Guard and Reserve soldiers, sailors, marines and airmen, who are able to attend a 20 week training program for welding and rigging.

Upon successful completion of the 20 week training program and associated requirements, the student will be guaranteed a job somewhere in the United States. All efforts will be made by the United Association of Plumbers and Pipefitters (UA) to place the graduate in a location he/she is interested in working and is qualified. However there is no job location preference guarantee.

Upon completion of the training program and acceptance into an apprenticeship position, the veteran has access to a training program with a progressive wage scale and a career in the pipefitting trades. Journeyworker pipefitter's salary and benefits are approximately $50 an hour.

- Location: Camp Williams, on Volk Field (National Guard Air and Army Base)
- Training: 5 days a week (20 weeks)
- Three to four classes per year are projected to be conducted.
- Cost:
  - UA Training is free. UA is providing two 53' training welding vans, rigging complex and instructors to facilitate the training.
  - Lodging: $11.00 per night (or approximately $1540 for twenty weeks) at the Wisconsin Military Academy at Ft. McCoy.
  - Food. Approximately $7.00 per meal, or $2940 for twenty weeks.
  - Transportation Worker Identity Card (TWIC): $132.50
  - Other expenses: work clothes, steel toed boots, gas to travel from Ft. McCoy to Camp Williams.
- Background checks will be conducted in order to acquire the Transportation Worker Identity card.
- Applicants must pass a urinalysis drug test.
- Division of Employment and Training (DET) staff will assist in coordinating with Unemployment Insurance, Workforce Development Agencies, VA Vocational Rehabilitation; however, funding for these supportive services cannot be guaranteed.
- Applicants must possess: 1) a DD214 reflecting an Honorable Discharge; 2) a valid driver's license and driving extract from the Division of Motor Vehicles, an eye exam within the last six months.
- Only those veterans who desire this career field and can financially afford to attend the course should apply. Those veterans with personal issues, family challenges that would prohibit them from attending all classes or are unwilling to relocate should not apply.
- Applicants will submit an application with required documentation before interviewing for the program. Applicants must be selected by an interview panel to be admitted into the program.
- Interested veterans can contact DWD staff for further information and assistance in completing the application material. The application material is also posted on the BAS website. DWD will refer qualified candidates to the UA; who will make the final decision on students that are accepted into each class.
- VIP program promotion fliers and application materials are available at Job Centers and DWD's Office of Veterans Services & Bureau of Apprenticeship Standards.

Department of Workforce Development
Division of Employment and Training
Bureau of Apprenticeship Standards
PO Box 7972
Madison WI 53707-7972

http://www.wisconsinapprenticeship.org
http://www.uavip.org/
veteransinpiping@dwd.wisconsin.gov

Section II. VIP Application. An application for the VIP program requires the following documents

- ☐ **Competed VIP Application… ALL questions thoroughly answered.**
- ☐ **Copy of Member 4, DD 214, indicating a Discharge/Character of Service as "Honorable"**
- ☐ **Eye exam, within the last six months**
- ☐ **Copy of a Five Year Driver Abstract from the DMV in the state you possess a valid driver's license. Individuals with a State of Wisconsin Driver's License can request a copy at http://www.dot.state.wi.us/drivers/points/abstract.htm**
- ☐ **Current resume with accurate contact information.**
- ☐ **Letter from the Department of Veterans Affairs with a current disability rating (if applicable)**
- ☐ **Medical clearance to perform the physical requirements of the occupation (if applicable)**
- ☐ **Applicants that submit a complete application packet that meet the qualification requirements will be scheduled for an interview.**

Application packets for Wisconsin's Veterans in Piping program are available at:

www.wisconsinapprenticeship.org

If you would like assistance with completing an application, contact Office of Veterans Services staff. To locate staff near you visit: http://dwd.wisconsin.gov/veterans/default.htm

Section IV Frequently Asked Questions

Website: www.wisconsinapprenticeship.org
Email: veteransinpiping@dwd.wisconsin.gov
Call: Bureau of Apprenticeship Standards @ 608.266.5373

Category	***Cost***
Question	*How much does the training cost?*
Answer	*There is no cost to the veteran participant for the training. The United Association (UA) provides two 53' training welding vans, rigging complex and instructors to facilitate the training at a cost of about $25,000 per student.*
Question	*Are there funds available for food, lodging, travel, etc.?*
Answer	*Participating students need to be prepared to pay for lodging, food and incidentals because there are no funds dedicated specifically for this purpose. However, participating students may be eligible for Unemployment Insurance, Dislocated Worker funds, Workforce Development training funds, the VA's Vocational Rehabilitation program and/or training grants from a variety of organizations.*
Question	*What other expenses are there?*
Answer	*Other expenses include: work clothes, steel toed boots, identification cards, and gas to travel between the lodging location at Ft. McCoy and the training location at Camp Williams.*
Question	*Can VA education benefits be used to offset the costs of food, lodging and training?*
Answer	*No. The VIP training program has not been approved for GI Bill/Post 911 education benefits at this time. There is an ongoing effort to gain approval for veteran's educational benefits for future VIP classes students. However, veteran's education benefits/GI Bill can be used once the graduate has been placed into an apprenticeship program after the completion of the VIP training.*
Question	*What programs are available to help defray the costs of food, lodging, and other incidentals?*
Answer	*Veterans rated with a disability through the Department of Veterans Affairs (VA) may be eligible for retraining funding through the VA Vocational Rehabilitation program. There are other funding sources that veterans may be eligible for on a case by case basis, including Unemployment Insurance; Workforce Investment Act/Dislocated Worker (individuals can apply through their regional Workforce Development Board); and the Wisconsin Department of Veterans Affairs has a Job Retraining Grant (http://dva.state.wi.us/Ben_retraininggrants.asp) for veterans that meet specific application criteria. In addition, there are various veterans' organizations and corporate organizations that have job training grant opportunities for veterans and non-veterans.*
Category	***Applying for the Program***
Question	*Who is eligible to apply?*
Answer	*The VIP program goal is to assist Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) veterans with employment. All veterans with an Honorable Discharge are eligible to apply.*
Question	*How do I apply for the program?*
Answer	*An application is available at www.wisconsinapprenticeship.org or send an email requesting the application to veteransinpiping@dwd.wisconsin.gov*
	Accompanying the VIP application the following documents are required: *1) DD 214 (military service record form) that reflects an Honorable Discharge* *2) a copy of their driving record (which can be acquired from the Division of Motor Vehicles*

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	(DMV) http://www.dot.state.wi.us/drivers/drivers/points/abstract.htm *3) and an eye exam conducted within the last six months when applying for the program* *4) a resume* *5) Letter from the Department of Veterans Affairs with a current disability rating (if applicable)* *6) Medical clearance to perform the physical requirements of the position (if applicable)* *7) Applicants that submit a complete application that meet the qualification requirements will be scheduled for an interview.*
Question	*How are applicants selected for the VIP program?*
Answer	*Interviews will be conducted for applicants that have submitted a completed application and meet the eligibility criteria approximately one month prior to the start date of a class*
Category	***Training***
Question	*Where is the VIP training conducted?*
Answer	*Camp Williams, on Volk Field, a Wisconsin National Guard base. The training is five 5 days a week for 20 weeks. Students may have the opportunity to gain additional training on weekends.*
Question	*Will I be paid during the training?*
Answer	*No, the training is provided at no cost, but students are not paid during the training.*
Category	***Lodging/Food***
Question	*Is there food and lodging available?*
Answer	*Lodging is available at $11.00 per night (or approximately $1540 for twenty weeks) at the Wisconsin Military Academy at Ft. McCoy.* *Meals are charged on an individual meal basis. Approximately $7.00 per meal, or $2940 for twenty weeks.*
Category	***Employment upon graduation***
Question	*Where will I be employed upon completion of the VIP training?*
Answer	*Upon successful completion of the 20 week training program and associated requirements, the student will be guaranteed a job somewhere in the United States. All efforts will be made by the United Association of Plumbers and Pipefitters (UA) to place the graduate in a location he/she is interested in working and is qualified. However there is no job location preference guarantee.*
Question	*How much can a VIP graduate expect to earn?*
Answer	*VIP graduates have been placed into initial employment at wages between $14 and $27 an hour plus benefits. Upon acceptance into an apprenticeship position, the veteran has access to an apprenticeship program with a progressive wage scale and a career in the pipefitting trades. Upon completing the apprenticeship (usually four to five years, depending on the occupation) a journeyworker's salary and benefits are approximately $50 an hour.*
Question	*I am not sure I am able to relocate upon the completion of the training. Should I apply?*
Answer	*The VIP program is not for everyone. For example, if you are unable to relocate or have personal issues that would affect training attendance, this program may not be suitable for your employment needs.*

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Category	*Apprentice Credit*
Question	*What credit will I receive towards the apprenticeship program?*
Answer	*VIP students that successfully complete the program including at least 2 welding certifications will receive one year of on the job learning credit towards their apprenticeship term. Apprentices must take all paid related instruction (PRI) classes related to their apprenticeship, unless their local apprenticeship sponsor grants PRI credit.*

SECTION V: WELDING SAFETY AND CARE & USE OF TOOLS

Objective:

Each student must have completed class room instruction and hands on practical exercises on Welding Safety and the Care & Use of Tools.

1. Personal Protective Equipment

a) Eye Protection

b) Hand Protection

c) Foot Protection

d) Ear Protection

e) Face and Head Protection

f) Proper Clothing

g) Shaded Lenses Requirements (discuss brighter arc with no slag shielding)

2. Welding Safety

a) Fume Hazards and Ventilation during welding

b) Work Area Safety

c) Compress Gas Cylinder Storage and Handling

d) Material handling

e) Tool Safety

- Bench and grinder safety (incorporate tungsten grinding)

- Hand Tool and Power equipment safety

3. Use and Care of Hand Tools

a) Identify layout and measuring tools and their uses

- Folding rulers

- Levels

- 25 & 100 foot tape rules

- 2 foot and combination squares

d) Identify other hand tools used by welders and their uses

- Ball peen and sledge hammers

- Scribes, picks and other special cleaning tools

- Side cutters (Klein's)

- Hi low gauges

- Bevel protractors
- Fitter wedge

b) Identify clamping tools and their uses

- Vice Grips
- C clamps
- Channel Locks

e) Power Tools

- Safe operation of bench and pedestal grinders
- Safe operation of angle and straight grinders
- Use and safe operation of metal forming and shaping tools
- Identify procedures for cutting metals using power cut-off saws, and metal cutting band saws

c) Identify cutting/finishing tools and their uses

- Bastard files
- Chisels
- Wire brushes (stainless/carbon)
- Small fine mill file
- Flapper wheels for GTAW pipe end preparation

f) Safe practice of sharpening tungsten on pedestal grinders (discuss options for holding and turning tungsten during sharpening)

4. Hands on Exercises using Tools

a) Hand Tools

- Practice with layout and measuring tools
- Practice with clamping tools
- Practice with cutting/finishing tools

b) Power Tools

- Practice with power tools

SECTION VI: OXY-FUEL SAFETY AND OXY-FUEL CUTTING EQUIPMENT

Objective: Each student must be able to demonstrate safe handling and set-up of oxy-fuel equipment, practical applications of preheating and cutting on plate and pipe, correct selection of tip sizes.

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1. Introduction to Oxy-Fuel Process

a) Oxy-fuel Safety Summary

- Protective Clothing and Equipment
- Fire/Explosion Prevention
- Work Area Ventilation

b) Oxy-fuel Cutting Equipment

- Oxygen
- Acetylene
- Liquefied Fuel Gases
- Regulators
- Hoses

c) Cutting Torches

d) Cutting Torch Tips

e) Tip Cleaners and Tip Drills

f) Friction Lighters

g) Cylinder Cart

h) Soapstone Markers

2. Setting up Oxy-fuel Equipment

a) Transporting and Securing Cylinders

b) Cracking Cylinder Valves

c) Attaching Regulators

d) Installing Flashback Arrestors or Check Valves

e) Connecting Hoses to Regulators

f) Attaching Hoses to the Torch

g) Connecting Cutting Attachments (Combination Torch Only)

h) Installing Cutting Tips

i) Closing Torch Valves and Loosening Regulator Adjusting Screws

j) Opening Cylinder Valves

k) Purging the Torch and Setting the Working Pressures

l) Testing for Leaks

3. Controlling the Oxy-fuel Torch Flame

a) Oxy-fuel Flame Types (i.e. Neutral, Carbonizing)

b) Backfires and Flashbacks

c) Igniting the Torch and Adjusting the Flame

d) Shutting Off the Torch

4. Shutting Down and Disassembling Oxy-fuel Equipment

a) Shutting Down Oxy-fuel Cutting Equipment

b) Disassembling Oxy-fuel Cutting Equipment

c) Changing Empty Cylinders

d) Practice Setting-up, igniting, adjusting, shutting down and disassembling oxy-fuel equipment as well as changing empty cylinders

5. Performing Cutting Operations

a) Oxy-fuel Cutting Equipment Operation

b) Torch Adjustment

c) Straight Line Cutting

d) Bevel Cutting on Plate

e) Bevel Cutting on Pipe

f) Performing Cutting

- Preparing for Oxy-fuel Cutting and Hand Cutting Torch
- Cutting thick Steel
- Piercing Plate & Pipe When Cutting Bevels
- Inspecting the Cut Edges

6. Hands on Practical Exercises

a) Perform a square cut on a 1/2" mild steel plate

b) Cut a 37° bevel on a 6" Sch. 80 mild steel pipe for preparation of a weld joint

SECTION VII: BASE METAL PREPARATION & JOINT DESIGNS

Objective: Each student must have completed class room instruction and hands on practical exercises on material preparation and weld joint configurations.

1. Base Metal Cleaning

a) Surface Corrosion

b) Defects caused by Surface Contamination

c) Mechanical Cleaning

d) Hand Tool Use

e) Power Tool Use

f) Inspecting the Prepared Areas

2. Joint Configurations

a) V-Groove
b) Fillet
c) Socket

3. Fittings

a) Flanges
b) Sockets
c) Weld-O-Lets

4. Welding Positions

a) Flat
b) Vertical
c) Horizontal
d) Over Head

5. Thermal Joint Preparation

a) Preheat Temperatures
b) Interpass Temperatures
c) Tempsticks

6. Mechanical Joint Preparation

a) Grinders
b) Pipe Beveling Machines

7. Hands on Practical Exercises

a) Prepare plate joints mechanically
b) Prepare plate joints thermally
c) Prepare pipe coupons for a single bevel open V-groove manually
d) Prepare pipe coupons for a single bevel open V-groove by machine.

SECTION VIII: SHIELDED METAL ARC WELDING (SMAW)

Objective:

Each student must have completed class room instruction and hands on practical exercises on the basics of shielded metal arc welding.

1. Set-up and Equipment Preparation for SMAW Process

a) Types of Welding Current
- DC Welding Current
- Polarity

d) Welding Cable
- Welding Cable End Connections
- Lugs and Quick Disconnects

- Work Piece Clamps
- Electrode Holder

b) Characteristics of Welding Current
- Amperage
- Voltage

e) Equipment Setup
- Selecting the Proper SMAW Equipment
- Locating the Work Piece Clamp
- Energizing Electrically Powered Welding Machines

c) Welding Machine Types
- Transformer Welding Machines
- Inverter Power Sources

f) Tools for Cleaning Welds
- Hand Tools
- Pneumatic Cleaning and Slag Removal Tools
- Power Tools

2. SMAW Electrodes

a) AWS Filler Metal Specification System
- Classification System
- Manufacturer's Identification
- Electrode Sizes

c) Electrode Selection Considerations
- Welding Procedure Specification
- Base Metal Type
- Base Metal Thickness
- Base Metal Surface Condition
- Welding Position
- Joint Design
- Welding Current

b) Electrode Types
- Fast-Freeze Electrodes
- Fast-Fill Electrodes
- Fill-Freeze Electrodes
- Low-Hydrogen Electrodes

d) Filler Metal Control and Storage
- Filler Metal Traceability Requirements
- Code requirements
- Receiving Filler Metal
- Storing Filler Metal
- Storage Ovens
- Exposure Times
- Drying Electrodes

3. Pad Welding

a) Beginning Welding Exercises

c) Position Welds on Plate

- Practice setting up welding equipment,

- Practice striking and extinguishing an arc

b) Stringer, Weave and Overlapping Beads

- Practice stringer & weave beads with E6010 and E7018

- Practice overlapping beads with E6010 and E7018

- Practice flat, horizontal, vertical an overhead welds with E6010 and E7018

d) Performance Evaluation

- Each student must be able to satisfactorily complete stringer, weave and overlapping bead placement welds on pad weld coupons using (1/2" x 4" x 6") plate, in the flat, vertical, horizontal, and overhead positions, using E6010 & E7018 (3/32” & 1/8”). Visual inspections of the coupons will be performed by the UA Welding Instructor.

- Failure to pass the evaluation will result in the student being remanded to the UA Welding Instructor for evaluation and determination as to future training of the individual.

4. Plate Welding

a) Welding Plate Groove Weld Coupons

Practice flat, horizontal, vertical an overhead welds on open-root V-groove joints using (1/2” x 4” x 6”) plate coupons with E6010 root with E7018 fill (3/32” & 1/8”).

b) Performance Evaluation

Each student must be able to satisfactorily complete open butt groove welds using (1/2” x 4” x 6”) plate coupons, with E6010 root with E7018 fill (3/32” & 1/8”), in the flat, horizontal, vertical and overhead test positions. Visual inspections and bend tests of the plate coupons will be performed by the UA Welding Instructor

Failure to pass the evaluation will result in the student being remanded to the UA Welding Instructor for evaluation and determination as to future training of the individual

5. Pipe Welding

a) Bead on Pipe Welds

Practice stringer & weave beads on 6 inch Sch. 80 pipe coupons in the 2G & 5G positions using E6010 & E7018 (3/32” & 1/8”)

b) Instruction in Preparing V-Groove Pipe Welds

Pipe groove weld configurations & positions

Open butt root pass welding

Electrode selection for different weld passes

Acceptable and unacceptable groove weld profiles

c) Practice welding multiple open root v-groove pipe welds in the 2G & 5G positions using both 6 inch Sch. 40 and 3 inch Sch.40 pipe coupons, with E6010 root with E7018 fill (3/32” & 1/8”).

d) Performance Evaluation

Each student must be able to consistently complete open butt groove welds on three 2 inch Sch. 80 pipe coupons in both the 2G and 5G test positions, with E6010 root with E7018 fill (3/32”). Visual inspections and bend tests of the pipe coupons will be performed by the UA Welding Instructor

Failure to pass the tests will result in the student being remanded to the UA Welding Instructor for evaluation and determination as to future training of the individual.

e) If the student satisfactorily completes all the practice and evaluation welds specified above, they will be required to pass the UA-76 weld test. Radiographic examinations of the test coupon will be performed by a local independent test lab. Failure to pass the test will result in the student being remanded to the UA Welding Instructor for evaluation and determination as to future training of the individual.

SECTION IX: GAS TUNGSTEN ARC WELDING (GTAW)

Objective: Each student must have completed class room instruction and hands on practical exercises on the basics of gas tungsten arc welding.

1. Set-up and Equipment Preparation for GTAW Process

a) Types of Welding Current
- DC Welding Current
- AC Welding Current
- Polarity
- High Frequency

b) Characteristics of Welding Current
- Amperage
- Voltage

d) GTAW Equipment
- GTAW Torches
- Gas Nozzles
- Shielding Gas
- Argon
- Helium
- Gas Regulators/Flow meters
- Remote Current Control

e) Equipment Setup
- Selecting the Proper GTAW Equipment
- Locating the Work piece Clamp
- Energizing Electrically Powered Welding Machines
- Selecting Shielding Gas
- Setting the Shielding Gas Flow Rates
- Selecting and installing nozzles and electrodes
- Breaking down and reassembling a

GTAW torch

c) Welding Machine Types

- Transformer Welding Machines
- Inverter Power Sources

2. Tungsten Electrodes Types and Color Code

a) 2% Thoriated – Color Code Red

b) 2% Ceriated - Color Code Orange

c) 1% Thoriated - Color Code Yellow

3. Preparing Tungsten

a) Tapered End

b) Straight Ground

c) 2 ½ Times Electrode Diameter

4. Filler Metals

a) ER70S-2

b) ER70S-6

c) ER-316

5. Pipe Welding

a) Bead on Pipe Welds

Practice stringer & weave beads on 6 inch Sch. 80 pipe coupons in the 2G & 5G positions using ER70S-2 (3/32” & 1/8”)

b) Instruction in Preparing V-Groove Pipe Welds

Pipe groove weld configurations & positions

Open butt root pass welding

Electrode selection for different weld passes

Acceptable and unacceptable groove weld profiles

c) Practice welding multiple open root v-groove pipe welds in the 2G & 5G positions using both 6 inch Sch. 40 and 3 inch Sch.40 pipe coupons, with ER70S-2 (3/32” & 1/8”).

Students will also be instructed in the technique of walking the cup and practice the technique on 6" Sch. 80 pipe coupons in the 2G & 5G positions.

d) Performance Evaluation

Each student must be able to consistently complete open butt groove welds on three 2 inch Sch. 80 pipe coupons in both the 2G and 5G test positions, with ER70S-2 (3/32" & 1/8") root with E7018 fill (3/32"). Visual inspections and bend tests of the pipe coupons will be performed by the UA Welding Instructor

Failure to pass the tests will result in the student being remanded to the UA Welding Instructor for evaluation and determination as to future training of the individual.

e) If the student satisfactorily completes all the practice and evaluation welds specified above, they will be required to pass the UA-15 weld test. Radiographic examinations of the test coupon will be performed by a local independent test lab. Failure to pass the test will result in the student being remanded to the UA Welding Instructor for evaluation and determination as to future training of the individual.

f) At the option of the course instructor students should be encouraged to take and pass the UA-41 weld test, this will introduce the student to setting-up and welding with purge gases.

SECTION X: PIPE SPOOL – WELDING PROJECT

Objective:

Each student must be able to satisfactorily complete the fabrication and welding of the spool piece using both the SMAW and GTAW processes in accordance with the drawing, contained in the Sample Documents section of this manual.

All joints are to be laid out and prepped by students. Progress of the student will be tracked utilizing the Pipe Spool Weld Traveler, contained in the Sample Documents section of this manual.

Visual inspections of the welds will be performed by the UA Welding Instructor.

Failure to demonstrate the ability to make sound welds will result in the student being remanded to the UA Welding Instructor for evaluation and determination as to future training of the individual.

SECTION XI: OTHER AVAILABLE VIP PROGRAM MATERIAL

Visit http://www.uavip.org

Visit http://www.wisconsinapprenticeship.org

The Candidate Application & Assessment packet is available online at this website

Or Email: veteransinpiping@dwd.wisconsin.gov